



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2016-3697; Directorate Identifier 2015-NM-143-AD]

RIN 2120-AA64

Airworthiness Directives; The Boeing Company Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to supersede Airworthiness Directive (AD) 2011-01-15, which applies to certain The Boeing Company Model 757-200, -200CB, and -300 series airplanes. AD 2011-01-15 currently requires repetitive inspections for cracking of the fuselage skin of the crown skin panel along the chem-milled step at stringers S-4L (left) and S-4R (right), from stations (STA) 297 through STA 439, and repair, if necessary. AD 2011-01-15 also includes terminating action for the repetitive inspections of the repaired areas only. Since we issued AD 2011-01-15, we received reports of the initiation of new fatigue cracking in the fuselage skin of the crown skin panel along locally thinned channels adjacent to the chem-milled steps. This proposed AD would add repetitive inspections for cracking in additional areas and repair if necessary. This proposed AD would also remove airplanes from the applicability in AD 2011-01-15. This proposed AD would also add an optional skin panel replacement which would terminate all inspections and an optional preventative modification that would terminate certain inspections. We are proposing this AD to detect and correct fatigue cracking of the fuselage skin of the crown skin panel, which could result in pressure venting and consequent rapid decompression of the airplane.

DATES: We must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.
- Fax: 202-493-2251.
- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.
- Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this NPRM, contact Boeing Commercial Airplanes, Attention: Data & Services Management, 3855 Lakewood Boulevard, MC D800-0019, Long Beach, CA 90846-0001; telephone: 206-544-5000, extension 2; fax: 206-766-5683; Internet <https://www.myboeingfleet.com>. You may view this referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221. It is also available on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2016-3697.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2016-3697; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Office

(phone: 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Eric Schrieber, Aerospace Engineer, Airframe Branch, ANM-120L, FAA, Los Angeles Aircraft Certification Office (ACO), 3960 Paramount Boulevard, Lakewood, CA 90712-4137; phone: 562-627-5348; fax: 562-627-5210; email: eric.schrieber@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to send any written relevant data, views, or arguments about this proposed AD. Send your comments to an address listed under the ADDRESSES section. Include “Docket No. FAA-2016-3697; Directorate Identifier 2015-NM-143-AD” at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD because of those comments.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

Discussion

On December 28, 2010, we issued AD 2011-01-15, Amendment 39-16572 (76 FR 1351, January 10, 2011), for certain The Boeing Company Model 757-200, -200CB, and -300 series airplanes. AD 2011-01-15 requires repetitive inspections for cracking of the fuselage skin of the crown skin panel along the chem-milled step at stringers S-4L and S-4R, from stations (STA) 297 through STA 439, and repair if necessary. AD 2011-01-15 also includes terminating action for the repetitive inspections of the repaired areas only.

AD 2011-01-15 resulted from reports of cracking in the fuselage skin of the crown skin panel. We issued AD 2011-01-15 to detect and correct fatigue cracking of the fuselage skin of the crown skin panel, which could result in pressure venting and consequent rapid decompression of the airplane.

Actions since AD 2011-01-15, Amendment 39-16572 (76 FR 1351, January 10, 2011), was Issued

The preamble to AD 2011-01-15, Amendment 39-16572 (76 FR 1351, January 10, 2011), specifies that we consider the requirements “interim action.”

AD 2011-01-15 explains that we might consider further rulemaking if final action is later identified. We now have determined that it is necessary to initiate further rulemaking to add repetitive inspections for cracking in additional areas for certain airplanes, and repair if necessary.

We have removed Model 757-200 CB series airplanes from the applicability because the crown skins on those airplanes are manufactured differently and therefore are not affected by the identified unsafe condition.

We have also determined that the external detailed inspection that is allowed as an option in AD 2011-01-15, Amendment 39-16572 (76 FR 1351, January 12, 2011), does not adequately address the identified unsafe condition. Only eddy current inspections are adequate to address the identified unsafe condition.

Related Service Information under 1 CFR part 51

We reviewed Boeing Special Attention Service Bulletin 757-53-0097, Revision 2, dated July 28, 2015. The service information describes procedures for repetitive external sliding probe eddy current (EC) and external spot-probe-medium-frequency EC inspections for cracking of the crown skin panel, repair, a preventive modification, and replacement of the crown skin panel. This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

FAA's Determination

We are proposing this AD because we evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop in other products of the same type design.

Proposed AD Requirements

This proposed AD would require accomplishing the actions specified in the service information described previously. For information on the procedures and compliance times, see this service information at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2016-3697.

Explanation of "RC" Steps in Service Information

The FAA worked in conjunction with industry, under the Airworthiness Directive Implementation Aviation Rulemaking Committee (ARC), to enhance the AD system. One enhancement was a new process for annotating which steps in the service information are required for compliance with an AD. Differentiating these steps from other tasks in the service information is expected to improve an owner's/operator's understanding of crucial AD requirements and help provide consistent judgment in AD compliance. The steps identified as RC (required for compliance) in any service information identified previously have a direct effect on detecting, preventing, resolving, or eliminating an identified unsafe condition.

Costs of Compliance

We estimate that this proposed AD affects 652 airplanes of U.S. registry.

We estimate the following costs to comply with this proposed AD:

Estimated costs

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Inspections (Zone 1) [Retained actions from AD 2011-01-15, Amendment 39-16572 (76 FR 1351, January 10, 2011)]	2 work-hour X \$85 per hour = \$170 per inspection cycle	\$0	\$170 per inspection cycle	\$110,840 per inspection cycle
Inspections (Zones 2 and 3)[new proposed action]	Up to 4 work-hours X \$85 per hour = Up to \$340 per inspection cycle	\$0	Up to \$340 per inspection cycle	\$221,680 per inspection cycle
Optional modification	Up to 615 work-hours X \$85 per hour = Up to \$52,275	Up to \$26,496	Up to \$78,771	Up to \$51,358,692

We have received no definitive data that would enable us to provide a cost estimate for the on-condition actions specified in this proposed AD.

We have received no definitive data that would enable us to provide a cost estimate for the optional replacement specified in this proposed AD.

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA’s authority to issue rules on aviation safety. Subtitle I, Section 106, describes the authority of the FAA Administrator. Subtitle VII, Aviation Programs, describes in more detail the scope of the Agency’s authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701, “General requirements.” Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by

prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We have determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that the proposed regulation:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
- (3) Will not affect intrastate aviation in Alaska, and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by removing Airworthiness Directive (AD) 2011-01-15, Amendment 39-16572 (76 FR 1351, January 10, 2011), and adding the following new AD:

The Boeing Company: Docket No. FAA-2016-3697; Directorate Identifier 2015-NM-143-AD.

(a) Comments Due Date

The FAA must receive comments on this AD action by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

This AD replaces AD 2011-01-15, Amendment 39-16572 (76 FR 1351, January 10, 2011).

(c) Applicability

(c) This AD applies to The Boeing Company Model 757-200 and -300 series airplanes, certificated in any category, as identified in Boeing Special Attention Service Bulletin 757-53-0097, Revision 2, dated July 28, 2015.

(d) Subject

Air Transport Association (ATA) of America Code 53, Fuselage.

(e) Unsafe Condition

This AD was prompted by reports of the initiation of fatigue cracking in the fuselage skin of the crown skin panel along locally thinned channels adjacent to the chem-milled steps. We are issuing this AD to detect and correct fatigue cracking of the fuselage skin of the crown skin panel, which could result in pressure venting and consequent rapid decompression of the airplane.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Repetitive Inspections

Do the applicable inspections required by paragraphs (g)(1), (g)(2), and (g)(3) of this AD.

(1) For all airplanes: At the applicable time specified in table 1 of paragraph 1.E., “Compliance,” of Boeing Special Attention Service Bulletin 757-53-0097, Revision 2, dated July 28, 2015: Do the inspection specified in paragraph (g)(1)(i) or (g)(1)(ii) of this AD in accordance with the Accomplishment Instructions of Boeing Special Attention Service Bulletin 757-53-0097, Revision 2, dated July 28, 2015. Repeat the inspection thereafter at the applicable times specified in table 1 of paragraph 1.E., “Compliance,” of Boeing Special Attention Service Bulletin 757-53-0097, Revision 2, dated July 28, 2015. Accomplishing the preventative modification specified in paragraph (j)(1) of this AD or the replacement specified in paragraph (j)(2) of this AD terminates the inspections required by this paragraph.

(i) Do an external sliding probe eddy current (EC) inspection for cracking of the crown skin panel at stringers S-4L (left) and S-4R (right).

(ii) Do an external spot-probe-medium-frequency EC inspection for cracking of the crown skin panel at stringers S-4L and S-4R.

(2) For airplanes on which any crack is found during any inspection required by paragraph (g)(1) of this AD; or any repair is installed that covers the Zone 1 inspection area specified in Boeing Special Attention Service Bulletin 757-53-0097, Revision 2, dated July 28, 2015; or any preventive modification is installed as specified in Part 3 of the Accomplishment Instructions of Boeing Special Attention Service Bulletin 757-53-0097, Revision 2, dated July 28, 2015: At the applicable time specified in table 2 of paragraph 1.E., “Compliance,” of Boeing Special Attention Service Bulletin 757-53-0097, Revision 2, dated July 28, 2015, except as required by paragraph (k)(1) of this AD: Do the inspection specified in paragraph (g)(2)(i) or (g)(2)(ii) of this AD, in accordance with the Accomplishment Instructions of Boeing Special Attention Service

Bulletin 757-53-0097, Revision 2, dated July 28, 2015. Repeat the inspection thereafter at the applicable times specified in table 2 of paragraph 1.E., "Compliance," of Boeing Special Attention Service Bulletin 757-53-0097, Revision 2, dated July 28, 2015. Accomplishing the replacement specified in paragraph (j)(2) of this AD terminates the inspections required by this paragraph.

(i) Do an external sliding probe EC inspection for cracking of the crown skin panel at stringers S-2L, S-3L, and S-3R, as applicable.

(ii) Do an external spot-probe-medium-frequency EC inspection for cracking of the crown skin panel at stringers S-2L, S-3L, and S-3R, as applicable.

(3) For airplanes on which any crack is found during any inspection required by paragraph (g)(1) of this AD; or any repair is installed that covers the Zone 1 inspection area specified in Boeing Special Attention Service Bulletin 757-53-0097, Revision 2, dated July 28, 2015; or any preventive modification is installed as specified in Part 3 of the Accomplishment Instructions of Boeing Special Attention Service Bulletin 757-53-0097, Revision 2, dated July 28, 2015: At the applicable time specified in table 3 of paragraph 1.E., "Compliance," of Boeing Special Attention Service Bulletin 757-53-0097, Revision 2, dated July 28, 2015, except as required by paragraph (k)(1) of this AD: Do the inspection specified in paragraph (g)(3)(i) or (g)(3)(ii) of this AD, in accordance with the Accomplishment Instructions of Boeing Special Attention Service Bulletin 757-53-0097, Revision 2, dated July 28, 2015. Repeat the inspection thereafter at the applicable times specified in table 3 of paragraph 1.E., "Compliance," of Boeing Special Attention Service Bulletin 757-53-0097, Revision 2, dated July 28, 2015. Accomplishing the replacement specified in paragraph (j)(2) of this AD terminates the inspections required by this paragraph.

(i) Do an external sliding probe EC inspection for cracking of the crown skin panel at stringers S-3L and S-3R.

(ii) Do an external spot-probe-medium-frequency EC inspection for cracking of the crown skin panel at stringers S-3L and S-3R.

(h) Post-Preventive Modification Supplemental Inspections

For airplanes on which a preventive modification has been installed as specified in Part 3 of the Accomplishment Instructions of Boeing Special Attention Service Bulletin 757-53-0097, Revision 2, dated July 28, 2015: At the applicable time specified in table 4 of paragraph 1.E., “Compliance,” of Boeing Special Attention Service Bulletin 757-53-0097, Revision 2, dated July 28, 2015; do eddy current and detailed inspections for cracking of the applicable areas of the fuselage skin of the doublers, triplers, and fillers of the preventive modification, in accordance with the Accomplishment Instructions of Boeing Special Attention Service Bulletin 757-53-0097, Revision 2, dated July 28, 2015. Repeat the inspection thereafter at the applicable times specified in table 4 of paragraph 1.E., “Compliance,” of Boeing Special Attention Service Bulletin 757-53-0097, Revision 2, dated July 28, 2015.

(i) Repair

If any cracking is found during any inspection required by paragraph (g)(1), (g)(2), (g)(3), or (h) of this AD, repair before further flight using a method approved in accordance with the procedures specified in paragraph (m) of this AD. Doing the repair ends the repetitive inspections for the repaired area only.

(j) Optional Terminating Actions

(1) Accomplishing the preventative modification, including doing high frequency EC inspections for cracking around existing fastener holes, in accordance with Part 3 of the Accomplishment Instructions of Boeing Special Attention Service Bulletin 757-53-0097, Revision 2, dated July 28, 2015, except as required by paragraphs (k)(2) and (k)(3) of this AD, terminates the inspections required by paragraph (g)(1) of this AD,

provided the preventative modification is done before further flight after accomplishing an inspection required by paragraph (g) of this AD.

(2) Replacing the crown skin panel between STA 297 and STA 439, S-4L to S-4R, using a method approved in accordance with the procedures specified in paragraph (m) of this AD, terminates the inspections required by paragraphs (g)(1), (g)(2), and (g)(3) of this AD.

(k) Exceptions to Service Information Specifications and Preventative Modification

(1) Where Boeing Special Attention Service Bulletin 757-53-0097, Revision 2, dated July 28, 2015, specifies a compliance time “after the Revision 2 date of this service bulletin,” this AD requires compliance within the specified compliance time after the effective date of this AD.

(2) Where Boeing Special Attention Service Bulletin 757-53-0097, Revision 2, dated July 28, 2015, specifies to contact Boeing for repair instructions: Before further flight, repair using a method approved in accordance with the procedures specified in paragraph (m) of this AD.

(3) If any cracking is found during any inspection specified in paragraph (j)(1) of this AD, before further flight, repair using a method approved in accordance with the procedures specified in paragraph (m) of this AD.

(l) Credit for Previous Actions

(1) This paragraph provides credit for Zone 1 inspections required by paragraph (g) of this AD, if those actions were performed before the effective date of this AD using Boeing Special Attention Service Bulletin 757-53-0097, dated November 22, 2010, which was incorporated by reference in AD 2011-01-15, Amendment 39-16572 (76 FR 1351, January 10, 2011).

(2) This paragraph provides credit for the Zone 1 inspection required by paragraph (g) of this AD, if those actions were performed before the effective date of this

AD, using Boeing Special Attention Service Bulletin 757-53-0097, Revision 1, dated January 6, 2011, which is not incorporated by reference in this AD.

(m) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Los Angeles Aircraft Certification Office (ACO), FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the ACO, send it to the attention of the person identified in paragraph (m)(1) of this AD. Information may be emailed to:

9-ANM-LAACO-AMOC-Requests@faa.gov.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(3) An AMOC that provides an acceptable level of safety may be used for any repair, modification, or alteration required by this AD if it is approved by the Boeing Commercial Airplanes Organization Designation Authorization (ODA) that has been authorized by the Manager, Los Angeles ACO, to make those findings. For a repair method to be approved the repair method, modification deviation, or alteration deviation must meet the certification basis of the airplane and the approval must specifically refer to this AD.

(4) AMOCs approved for AD 2011-01-15, Amendment 39-16572 (76 FR 1351, January 10, 2011), are not approved as AMOCs for the corresponding provisions of paragraph (g) of this AD.

(5) For service information that contains steps that are labeled as Required for Compliance (RC), the provisions of paragraphs (m)(5)(i) and (m)(5)(ii) apply.

(i) The steps labeled as RC, including substeps under an RC step and any figures identified in an RC step, must be done to comply with the AD. An AMOC is required for any deviations to RC steps, including substeps and identified figures.

(ii) Steps not labeled as RC may be deviated from using accepted methods in accordance with the operator's maintenance or inspection program without obtaining approval of an AMOC, provided the RC steps, including substeps and identified figures, can still be done as specified, and the airplane can be put back in an airworthy condition.

(n) Related Information

(1) For more information about this AD, contact Eric Schrieber, Aerospace Engineer, Airframe Branch, ANM-120L, FAA, Los Angeles Aircraft Certification Office (ACO), 3960 Paramount Boulevard, Lakewood, CA 90712-4137; phone: 562-627-5348; fax: 562-627-5210; email: Eric.Schrieber@faa.gov.

(2) For service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, 3855 Lakewood Boulevard, MC D800-0019, Long Beach, CA 90846-0001; telephone: 206-544-5000, extension 2; fax: 206-766-5683; Internet <https://www.myboeingfleet.com>. You may view this referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

Issued in Renton, Washington, on February 8, 2016.

Michael Kaszycki,
Acting Manager,
Transport Airplane Directorate,
Aircraft Certification Service.

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